



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|-----------------------|------------------|
| 10/528,409 | 03/18/2005 | Eddy Verclyte | VERC3005/JEK | 4431 |
| 23364 | 7590 | 02/14/2006 | EXAMINER | |
| BACON & THOMAS, PLLC 625 SLATERS LANE FOURTH FLOOR ALEXANDRIA, VA 22314 | | | MUROMOTO JR, ROBERT H | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 3765 | |

DATE MAILED: 02/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/528,409

Applicant(s)

VERCLYTE, EDDY

Examiner

Robert H. Muromoto, Jr.

Art Unit

3765

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 March 2005.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-13 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 18 March 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 9/26/2005.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Specification

This application does not contain an abstract of the disclosure as required by 37 CFR 1.72(b). An abstract on a separate sheet is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 2, 6, 9, 12 and 13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The recitation in claims 2, 6, 12 and 13, "facing away from the end of the piece of the weft yarn", is not clear. A weft yarn would have at least two ends (leading end and trailing end), possibly more (top, bottom, sides). It is not clear to which end the applicant is referring.

In claim 9, the recitation, "the stationary clamping face" has no clear antecedent basis. There are multiple clamps recited in claim 1, to which claim 9 is dependent, and there is no recitation of a stationary clamping face for any of the yarn clamps. It is not clear to which stationary clamping face the applicant is referring.

In claim 12, the recitation, "back relative to the clamping location of the other yarn clamp - in terms of the direction of the motion of the gripper", is not clear. A transfer gripper has two directions of motion (the so-called 'bringer' motion and the subsequent return motion) in a standard rapier loom. "Back" would be different with respect to the two standard motions. It is not clear to which direction of rapier motion the applicant is referring.

In claim 13, the recitations, "the yarn guide" and "the adjacent side wall" have no antecedent basis. There is no reference to yarn guides or sidewalls in claim 13 or claim 1, to which claim 13 is dependent. Also the recitation, "in terms of the direction of the motion of the gripper", is not clear. A transfer gripper has two directions of motion (the so-called 'bringer' motion and the subsequent return motion) in a standard rapier loom. It is not clear to which direction of rapier motion the applicant is referring.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-13, to the extent that they are understood are rejected under 35 U.S.C. 102(b) as being anticipated by Corain et al., US patent 5,007,463.

Before addressing specifics in the cited reference, it is noted that the claims are presented in Jepson claim format. The MPEP states, "Drafting a claim in Jepson format

Art Unit: 3765

(i.e., the format described in 37 CFR 1.75(e); see MPEP § 608.01(m)) is taken as an implied admission that the subject matter of the preamble is the prior art work of another. In re Fout, 675 F.2d 297, 301, 213 USPQ 532, 534 (CCPA 1982)."

Corain states, "it is well known that in the shuttleless weaving looms, the wefts are inserted by means of two weft inserter rapier. The rapiers are mounted on conveyor tapes and are moved by a reciprocating motion from the opposite sides of the weaving loom inside the shed of the warp yarns. At the center of the shed, the weft inserter rapier, which took the weft coming from the feed bobbin at one side of the weaving loom, and keeps the weft clamped by means of its clamping system, gives said weft to the opposite-side, weft pulling rapier, which slides the weft off from the inserter rapier, bringing it off the warp shed, on the other side of the weaving loom (col. 1, lines 16-29)."

Corain relates "to a weft inserter rapier for shuttleless weaving looms. Two points of transversal (in the direction of the length of the yarn) clamping of the weft on different support planes spaced apart from each other are provided making it possible for the clamping surfaces to be adapted in an optimum way, distributing more efficiently and more reliably the clamping forces on the weft yarns even if the wefts are irregular or inserted as double wefts (col. 1, lines 5-15)."

The elastic clamping foot 9, corresponds to the recited "resilient element" in claims 1-4, 6, 10, and 11.

The clamping arrangement in Corain, clearly shown in figures 3, 4, and 6, would be responsive to a tension force in the length of the yarn. The elastic clamping foot

being "elastic" itself would provide some response to a tension force in the weft yarn as well as the pivoting clamp arrangement disclosed by Corain.

As for claim 2, the limitation "the vicinity of a yarn clamp" is extremely broad. Also the limitation "facing away from the end of the weft yarn" is unclear as stated above. The elastic clamping foot 9, is clearly in "the vicinity" of either of the clamping arrangements 21, 24 of Corain.

The elastic clamping foot 9 is clearly a "component of a yarn clamp" and a "clamp element of the yarn clamp", as recited in instant claims 3 and 4.

In claim 5, applicant has used extremely broad limitations, "the region" and "the vicinity". These limitations are so broad that yarn guides anywhere in the base body could be considered in "the region" of each side wall and each of the topside and underside of the gripper and yarn clamps anywhere in the base body of the gripper could be considered in "the vicinity" of each yarn guide. Figure 1, clearly shows a weft yarn entering the upper side of the gripper, this entry point is a yarn guide in 'the region' of the upper side and a first side wall; and front portion 9' is a yarn guide in 'the region' of the lower side and the other side wall. The yarn clamping arrangements at 21 and 24 are in 'the vicinity' of the yarn guides. Additionally, two tips 6 and 7 perform the task of guiding the weft under the elastic clamping foot, also protruding steps 25 and 26 that provide a labyrinth path for the weft yarn, could be considered in yarn guides in "the region" of each sidewall and either of the topside or bottomside, respectively.

With respect to claim 6, the limitation "facing away from the end of the weft yarn" is unclear as stated above. Corain does clearly show stationary clamp faces 21, 22 in figure 3.

With respect to claims 7 and 8, the clamping arrangement in figures 5 and 6, is clearly rotatable and movable about pivot 15. The clamping arrangement would react to a tension force in the piece of weft yarn because the angle at which the yarn is threaded through the gripper. The clamping arrangement would react by opening, also the elasticity of the elastic clamping foot 9 would also react somewhat depending on the magnitude of the tension force applied.

Pursuant to claim 9, the members 23 and 24 are mounted on the horizontal clamping plane 5 and provide a stationary clamping surface as claimed.

With respect to claim 10, the elastic clamping foot 9, is in effect a leaf spring. A spring is defined as "a flexible elastic object" and a leaf spring is a particular type of spring made from a flat springy sheet (See non-patent literature cited in PTO-892). It is clear from the figures and the disclosure of Corain that the elastic clamping foot 9, is elastic and flat and therefore fits the definition of the term "leaf spring".

The front portion 9' of the clamping foot corresponds to a guide element as recited in claim 11. The front portion 9' clearly protrudes outward, in the direction of the front end and above the clamping region of the yarn clamp arrangement, as recited in claim 11.

With respect to claim 12, the limitation "facing away from the end of the weft yarn" is unclear, as well as, the limitation "in terms of the direction of motion of the

gripper", as stated above. The clamping arrangement of Corain forms two clamping areas along the length of the weft yarn. Depending on the point of reference and the direction of gripper motion, clamping area at 23 could be considered "set back" with respect to the other clamping area at 24, or vice versa.

With respect to claim 13, the limitation "facing away from the end of the weft yarn" is unclear, as well as, the limitation "in terms of the direction of motion of the gripper", as stated above. Also the recitations, "the yarn guide" and "the adjacent side wall" do not have clear antecedent basis. Referring to figure 4, member 25 forms a stop limiting the yarn path. And clamping area at 24, in figure 4 is clearly in front of the stop formed by member 25, assuming a bringing or forward direction of rapier motion.

Conclusion

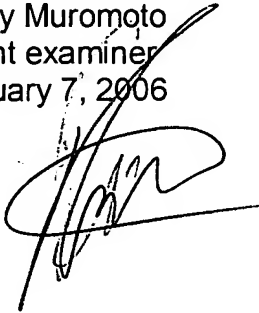
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert H. Muromoto, Jr. whose telephone number is 571-272-4991. The examiner can normally be reached on 8-530, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Calvert can be reached on 703-305-1025. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3765

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Bobby Muromoto
Patent examiner
February 7, 2006

A handwritten signature in black ink, appearing to be 'Bobby Muromoto', written over the printed name and date.